

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An analog electronic timepiece comprising:
a driving signal supplying unit configured to generate and supply a reference signal for clocking;
~~an amplifying unit configured to amplify a counter electromotive force generated by a~~
step motor that drives hand motions of time hands;
a driving unit that drives the step motor;
an impact detecting unit configured to detect an impact applied externally based on an output signal level of ~~the amplifying unit~~ a counter electromotive force generated by the step motor; and
a controlling unit configured to control to drive the step motor ~~using~~ by providing an intermittent driving pulse to the driving unit based on the reference signal supplied from the driving signal supplying unit when the time hands are in a hand-driven state, and to control to brake the step motor when an impact is detected by the impact detecting unit while the time hands are in a non-hand-driven state, wherein
~~the amplification ratio of the amplifying unit is set to a value that corresponds to at least one of a weight and a moment of inertia of the time hands~~ the controlling unit is configured to control a signal line of the driving unit for driving the step motor to be open in the non-hand-driven state.
2. (Currently Amended) The analog electronic timepiece according to claim ~~[[1]]~~ 18, wherein the amplifying unit is a chopper-amplifying unit configured to amplify at the amplification ratio based on a predetermined pulse period, and the predetermined pulse period is set to a value that corresponds to at least one of the weight and the moment of inertia of the time ~~hand~~ hands.
3. (Currently Amended) The analog electronic timepiece according to claim 2, wherein the predetermined pulse period of the chopper-amplifying ~~means~~ unit is set further to a value that corresponds to ~~the~~ a power source voltage.

4. (Canceled).

5. (Previously Presented) The analog electronic timepiece according to claim 2, wherein in the chopper-amplifier unit, a chopper-width is set to 30.5 ms.

6. (Previously Presented) The analog electronic timepiece according to claim 1, wherein the controlling unit includes a lock pulse output unit configured to control the step motor when the impact is detected, and the lock pulse output unit outputs a lock pulse for a term corresponding to a power source voltage supplied to the step motor.

7. (Currently Amended) The analog electronic timepiece according to claim ~~[[5]]~~ 6, wherein the lock pulse output unit is configured to output a continuous pulse having a same phase as that of the driving pulse generated when ~~[[an]]~~ the impact is ~~applied~~ detected.

8. (Currently Amended) The analog electronic timepiece according to claim 6, wherein the lock pulse output by the lock pulse output unit includes at least a lock term for outputting ~~the~~ a continuous pulse and a stable section for outputting an inversed pulse after the lock ~~terms~~ term has passed.

9. (Currently Amended) The analog electronic timepiece according to claim 1, wherein the controlling unit includes a load compensating unit configured to detect rotation of a rotor based on detection of a counter electromotive force from ~~the~~ a pulse motor soon after the output of the driving pulse.

10. (Currently Amended) The analog electronic timepiece according to claim 1, wherein the controlling unit is configured to provide stable terms respectively for starting ~~the~~ a rotor of ~~the~~ a pulse motor from a stationary stable point thereof before outputting the driving pulse, and for returning the rotor of the pulse motor to the stationary stable point thereof after outputting the driving pulse.

11. (Currently Amended) The analog electronic timepiece according to claim 1, wherein the impact detecting unit ~~is constituted of~~ includes inverters that operate based on

supply of a source power that is adapted to supply a constant voltage without depending on the a power source voltage.

12. (Currently Amended) The analog electronic timepiece according to claim ~~[[8]]~~ 9, wherein

the impact detecting unit includes an impact detecting resistor configured to detect a counter electromotive force from the pulse motor at the time of the impact, and

the load ~~compensation~~ compensating unit includes a load compensating resistor configured to detect a counter electromotive force from the pulse motor soon after the driving pulse is output.

13. (Currently Amended) The analog electronic timepiece according to claim ~~[[11]]~~ 12, wherein the impact detecting resistor has a resistance value set at the minimal resistance value with which the rotation of the pulse motor is detected.

14. (Currently Amended) The analog electronic timepiece according to claim ~~[[11]]~~ 12, wherein setting of the impact detecting resistor is set for each type of timepiece.

15. (Currently Amended) The analog electronic timepiece according to claim ~~[[11]]~~ 12, further comprising a detecting resistor used commonly for the impact detecting resistor and the load ~~compensation~~ compensating resistor, wherein

the impact detecting unit and the load compensating unit are configured to detect an impact and load compensation using the detecting resistor.

16. (Previously Presented) The analog electronic timepiece according to claim 6, wherein the lock pulse output unit is configured to secure an output term of the lock pulse when the lock pulse is input at a time of a logic frequency adjustment executed at predetermined intervals.

17. (Currently Amended) The analog electronic timepiece according to claim 6, further comprising a battery detection controlling unit configured to make the output of the

lock pulse precede when the lock pulse is output from the lock pulse output unit at a time of detection of the a power source voltage executed at predetermined intervals.

18. (New) The analog electronic timepiece according to claim 1, further comprising an amplifying unit configured to amplify the counter electromotive force, wherein the impact detecting unit detects the impact based on an output signal level of the amplifying unit, and

an amplification ratio of the amplifying unit is set to a value that corresponds to at least one of a weight and a moment of inertia of the time hands.

19. (New) The analog electronic timepiece according to claim 12, wherein the resistance value of the detecting resistor switches between that for impact detection and that for load compensation.